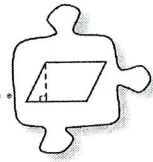


5.3.1 What if it is not a rectangle?

Rearranging Areas



5-66 RECTANGLE PUZZLES: Corey and Morgan were given two shape puzzles and were asked to find the area of each one. They know how to find the area of a rectangle, but they have never worked with shapes like these.

Corey and Morgan would like to rearrange each figure to make it into a single rectangle.

Using a piece of graph paper, help them decide how to cut each shape into pieces that they can be put back together as one rectangle.

- Discuss and decide on a strategy to try with your team.
- Cut and rearrange each shape into a rectangle to test your strategy.
- Sketch your team's rectangles into your notebook. Be sure to include labels with length and width information!

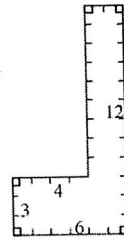


Figure A

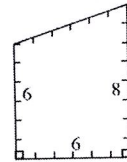


Figure B

5-67 Find the areas of Figures A and B from problem 5-66. Be sure to show or explain how you got your answer.

Reminder: The area of rectangles can be found by multiplying the length and width OR by counting squares inside the shape.

5-68 Solve it Another Way: Find the area of Figure A before you rearranged it into a single rectangle and without graph paper. Hint: Can you make smaller rectangles?

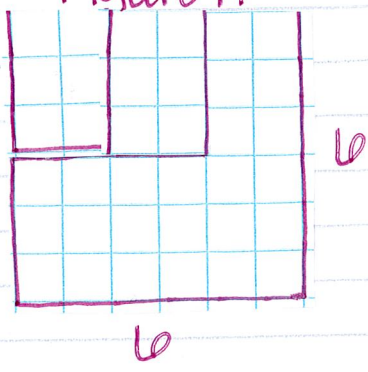
$6 \times 3 = 18$
The area of this piece is 18 square units.

$2 \times 12 = 24$
The area of this piece is 24 square units.

$24 + 18 = 36$
The total is 36 square units.

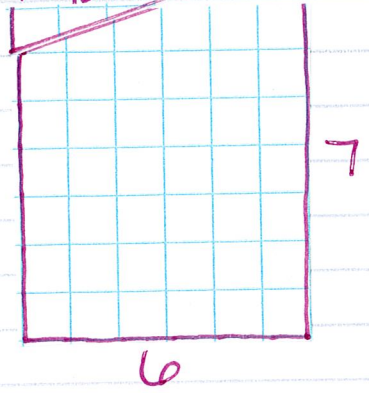
Figure A

Figure A



5-66

Figure B



5-67 The area of Figure A is 36 square units because $l \times l = 36$.

The area of Figure B is 42 square units because $l \times 7 = 42$.

5-68 Work shown on front.

The area is 36 square units.